National Aeronautics and Space Administration



2011



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### The NASA Vision

To reach for new heights and reveal the unknown, so that what we do and learn will benefit all humankind.

## The NASA Mission

Drive advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

## **NASA's Strategic Goals**

- **Goal 1**: Extend and sustain human activities across the solar system.
- **Goal 2**: Expand scientific understanding of the Earth and the universe in which we live.
- **Goal 3**: Create the innovative new space technologies for our exploration, science, and economic future.
- Goal 4: Advance aeronautics research for societal benefit.
- **Goal 5**: Enable program and institutional capabilities to conduct NASA's aeronautics and space activities.
- Goal 6: Share NASA with the public, educators, and students to provide opportunities to participate in our Mission, foster innovation, and contribute to a strong national economy.

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## Space Flight Awareness Motivation and Recognition Program

NASA established the Space Flight Awareness (SFA) Motivation and Recognition Program as a formal program after the Mercury and Gemini period, to infuse the space program with a renewed and strengthened consciousness of quality and flight safety.

As NASA's human space flight program continued and developed, the NASA Centers increased the assistance they provided to the employee motivation programs of their contractors and other government agencies. The future of space flight brings

new opportunities and challenges for the SFA Program. The program must keep pace with an ever-changing environment of people, systems, and processes that design, build, fly and support human space flight.

The National SFA Panel works diligently to ensure an effective program, one of value to the human space flight workforce. The focus of the program continues to be excellence in quality, safety and mission success.



## Message

On April 12, 1961, Yuri Gagarin launched aboard Vostok 1 from the Baikonur Cosmodrome in what was then the Soviet Union. While launching the first human into space was a daunting technical achieve-

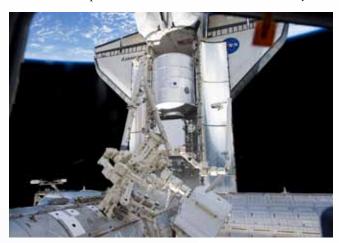
ment, it also sent a stark political message at the height of the Cold War about the prowess of Soviet engineers. With the Space Race in full swing, the United States and the Soviet Union embarked upon a campaign of competition to reach the ultimate high ground.

Twenty years later, the Space Shuttle Columbia roared to life, soaring into the sky on April 12, 1981. The world's first reusable space vehicle looked nothing like Vostok, Gemini, Soyuz, or Apollo. Standing a majestic 184 feet high at the



launch pad, the Shuttle would fly into space as a rocket, function as an orbiting laboratory and construction vehicle once there, and return to Earth as a glider, touching down on a

runway like no other spacecraft in history. The differences in the Shuttle, however, are more than skin deep. Over the course of their careers, the five Shuttles, Columbia, Challenger, Discovery, Atlantis, and Endeavour, would carry 362 people into orbit from 15 countries, traveling more than 530 million miles in the process. During the assembly of the International Space Station, these Shuttles would carry into



space multi-ton modules constructed in the United States, Russia, Europe, and Japan, and robotics from Canada. Although the Shuttle is a potent symbol of American pride, it is also a well-recognized ambassador to the world of American willingness to engage in mutually beneficial cooperation -- not competition -- in the exploration of the universe around Earth. The Shuttle even assisted in maintaining the Russian MIR space station.

Because of the Shuttle, the NASA human space flight program (HSF) has had many accomplishments through the years including in 2010. NASA and its international partners celebrated 10 years of permanent human habitation on the International Space Station on November 2, 2010. More than 600 different research and technology development experiments have been conducted aboard the Station, many of which are producing advances in medicine, environmental systems, and our understanding of the universe. Nearly 200 people from a dozen nations have lived and worked aboard the Station, research has been conducted and 151 spacewalks have been conducted in support of Station assembly and maintenance, totaling more than 950 hours. Additionally, in 2010, three Space Shuttle missions helped build and outfit the Station. The STS-130 mission in February delivered a cupola with seven windows and a robotic control Station. The cupola provides a panoramic view of Earth, celestial objects, and visiting spacecraft. The STS-131 mission in April delivered science racks and new crew sleeping quarters, installed a new ammonia storage tank for the Station's cooling system, and replaced a gyroscope for the Station's navigation system. In May, the STS-132 crew delivered the Russian-built Mini Research Module-1 known as Rassvet to the Station.

There are many other noteworthy HSF accomplishments over the past year that we can also be proud of. The Sabatier system was activated and can create up to 530 gallons of water per year from byproducts of the Station's Oxygen Generation System and Carbon Dioxide Removal Assembly, critical to sustaining the Station once the Shuttle is retired. We extended the World Wide Web into space by providing the Space Station astronauts that capability. The Station partners approved an international docking system standard that will provide guidelines for a common interface to link future spacecraft ranging from crewed to autonomous vehicles and from low-Earth orbit to deep space exploration missions. In addition to the languages spoken in the 15 countries that have had representatives aboard the Station, American Sign Language, or ASL, is now included. NASA



astronaut Tracy Caldwell Dyson sent a message in ASL from the Station to the deaf community. NASA selected nine experiments designed by students at seven schools for astronauts to perform on the Station for the new Kids in Micro-gl Program. The student experiment design challenge geared toward grades five through eight gives students a hands-on opportunity to design experiments or simple demonstrations for testing both in the classroom and in the Station's micro-gravity environment. SpaceX launched its Falcon 9 rocket and Dragon capsule on a demonstration flight that keeps it on course for providing important cargo flights to the Space Station in the future. And NASA continued its outreach to the public by hosting a number of "Tweet-Ups," enabling Twitter users to meet astronauts, talk live to the Station crew, and watch a Shuttle launch from Kennedy Space Center, Florida. Thank you to the NASA Space Flight Awareness (SFA) Program for your outstanding work in support of all of our HSF activities and events.

Over the coming months, it is important for us to stay focused on safely completing the Space Shuttle manifest. As NASA prepares to retire the Space Shuttle and pursue new exploration challenges, we look forward to NASA and contractor organizations continuing to partner with, participate in, and support the HSF SFA Program in recognizing our workforce for their exemplary HSF contributions. Even though the Shuttle Program will be completed, we look to the SFA Program to continue helping us in motivating and providing employee recognition to our dedicated civil service and contractor workforce for our various programs and mission successes. Let's continue to work together and focus on the future and its exciting opportunities ahead.

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William H. Gerstenmaier

Associate Administrator for Space Operations

## 2011 FY SFA Activities



#### October – December 2010

- Annual Safety Awareness Day (Oct)
- STS-133/Discovery launch SFA Honoree Event (launch attempt Nov)
- Exp 23, 24 ISS Exp Crew Debrief Special Event (Nov)
- Mission Motivation & Awareness Events

#### January - March 2011

- STS-133/Discovery launch Event (Feb)
- Exp 23, 24, 25 ISS Exp Crew Debrief Special Event (Feb)
- Soyuz TMA-21/26S launch (March)
- Creation of SFA Facebook page (March)
- Mission Motivation & Awareness Events

#### April - June 2011

- 30th Anniversary of STS-1 Launch (April)
- STS-133 Crew Debrief Special Event (April)
- STS-134/Endeavour launch SFA Honoree Event (April)
- Soyuz TMA-22/27S launch (May)
- SFA Advisory Committee Meeting at KSC (May)
- STS-135 Rollout of Space Shuttle Atlantis (May/June)
- STS-135/Atlantis launch SFA Honoree Event (June)
- Mission Motivation & Awareness Events

#### July - September 2011

- Expedition Awareness Events (Aug)
- End of Shuttle Program Crew Return, Wheels Stop Event (Aug)
- Soyuz TMA-23/28S launch (Sept)
- Mission Motivation & Awareness Events

## **SFA Program Goals**

#### Space Shuttle

- Be an agency resource in support of promoting personal commitment to human space flight safety and mission success.
- Support Space Shuttle 30th Year Anniversary activities.
- Promote workforce awareness through products and activities that focus on the safety and missions at hand.

#### **International Space Station**

 Promote Station visibility and continue to recognize significant milestones as we move forward with our international partners.

#### **Space Exploration**

• Promote awareness of future Programs by highlighting safety and superior performance.

#### **Additional Goals**

- · Continue Astronaut Motivational visits.
- Sponsor employee recognition and motivation events at various Centers.
- Sponsor major milestone events three times a year at several facilities.
- Increase the number of employees receiving SFA awards and being recognized by 10%.
- Conduct an SFA Program Awareness campaign to inform more organizations and employees about the SFA program and various awards available.
- Increase the diversity of employees receiving SFA awards and SFA recognition in terms of minorities and women, as well as younger professionals including employees ages 20-40 years of age.

## Space Flight Awareness Teams

#### **Cost and Performance**

Provides input of costs incurred on the Program as well as data on awards presented (including suppliers) and astronaut visits.

#### **Products**

Develops within funding constraints appropriate products to highlight safety and awareness for human space flight programs.

#### Program Plan

Provides a comprehensive plan of SFA's history, current year objectives, schedule, recognition programs and metrics.

#### 3-5 Year Plan

Positions the Space Flight Awareness Program to support evolving programs and contribute to the awareness of space exploration.

#### Supplier

Promotes awareness and provides recognition to critical suppliers that provide outstanding products and services in support of the human space flight programs.



## **SFA Objectives**

- Promote employee awareness on the importance of their role in promoting safety, quality and mission success.
- Conduct events that motivate and recognize the workforce, and enhance employee morale.
- Function as an internal communications team to disseminate key program safety, quality, and mission messages.
- Maintain awareness of the Space Flight Program accomplish-
- ments, milestones and objectives with a focus on safety and mission success and final shuttle missions.
- Provide management with resources to energize workforce during transition from the shuttle and station programs to the next generation of human space flight programs.
- Maintain supplier motivational awareness programs.

## **Space Flight Awareness Awards**

#### Flight Safety Award

This award recognizes significant, outstanding, individual or team contributions related to the prevention of anything that could lead to a catastrophic mishap to the vehicle, crew, or mission. The approval process for this award includes the SFA National Panel, the Flight Safety Panel, and the NASA Associate Administrator for Safety and Mission Assurance.



#### Honoree Award

This award is one of the highest presented to NASA and industry employees and is for first-level management and below. This award is presented to employees for their dedication to quality work and flight safety. To qualify, the individuals must have contributed beyond their normal work requirements to achieve significant impact on attaining a particular human space flight program goal; contributed to a major cost savings; been instrumental in developing modification to hardware, software, or materials that increase reliability, efficiency, or performance; assisted in operational improvements; or been a key player in developing a beneficial process improvement.

#### Leadership Award

This award is intended for recognition of mid-level managers who consistently demonstrate loyalty, empowerment, accountability, diversity, excellence, respect, sharing, honesty, and integrity, and are proactive.



#### Silver Snoopy

This is the astronauts' personal award. To qualify for this award, eligible candidates will have made contributions toward enhancing the probability of mission success, or made improvements in design, administrative/technical/production techniques, business systems, flight and/or systems safety or identification and correction or preventive action for errors. This award is generally not intended for management. Only one Silver Snoopy award for an individual is permitted.

#### Supplier Award

This annual award honors outstanding performance by hardware, software, or service suppliers who support NASA human space flight programs. Awardees are chosen based on their production of high-quality products, excellent technical and cost performance, and adherence to schedules.



#### **Team Award**

This award is used to recognize small groups of employees that have demonstrated exemplary teamwork while accomplishing a particular task or goal in support of the human space program.

Maximize safety awareness, motivation and recognition commemorating the Space Program

# Commemorating Our Space Shuttle Program

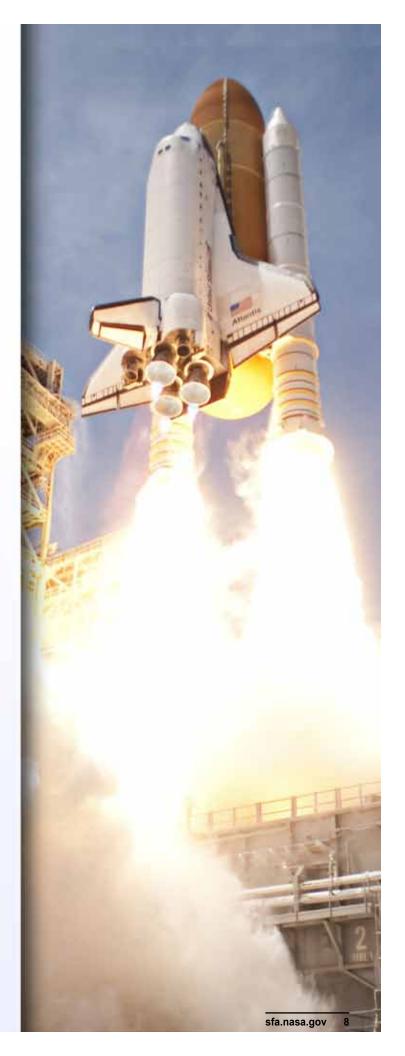
In recognition of the end of the Space Shuttle Program, many events and special commemorative items will be given to our workforce.

Space Flight Awareness is providing commemorative pins with flown metal to all employees with a message from William H. Gerstenmaier, Associate Administrator for Space Operations, as follows:

"The success of the Space Shuttle Program is a direct result of the contributions of the many men and women who have dedicated their careers to NASA. Thank you for your devotion and tireless efforts to enable these amazing accomplishments!"

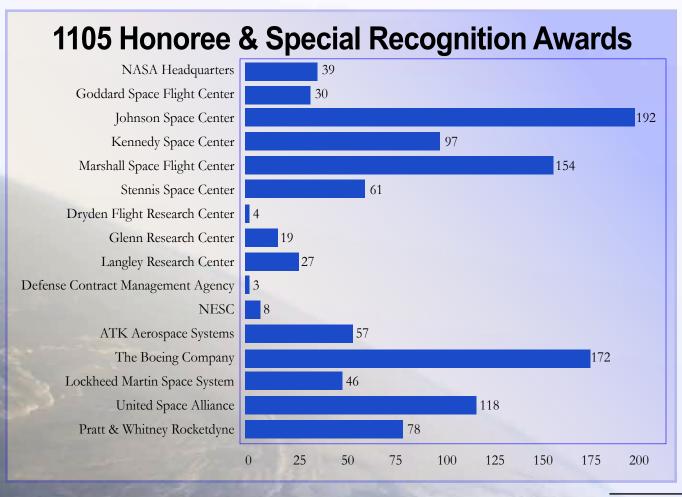
Additional plans will include supporting end of program activities as appropriate.



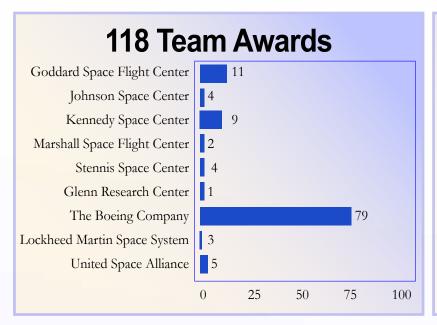


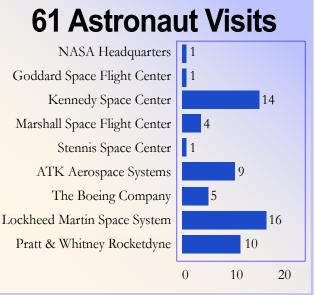
## 2010 Calendar Year Metrics

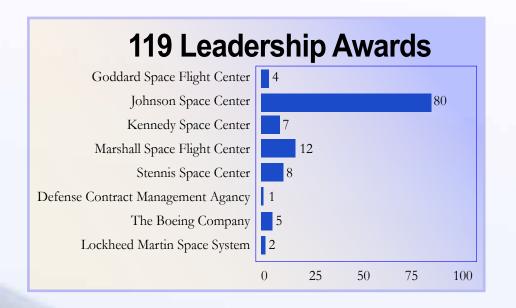




## 2010 Calendar Year Metrics

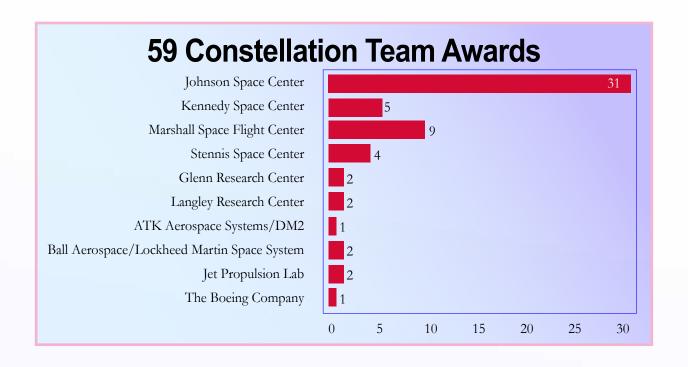


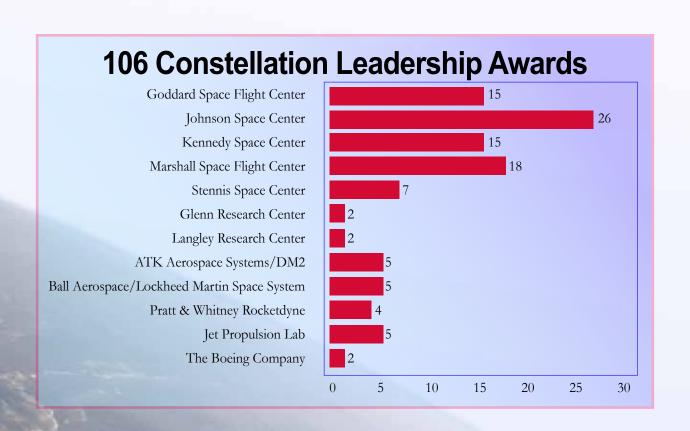






## **Constellation Recognitions**





## **SFA Panel Members**

Alotta Taylor, Office of Space Operations NASA Headquarters, Program Manager

Cynthia Bailey, United Space Alliance

Debra Berkman, Lockheed Martin Space System Co

Sallie Bilbo, NASA Stennis Space Center

Dawn Brooks, NASA Headquarters

Elizabeth Cantu, NASA Johnson Space Center

Gena Cox, NASA Marshall Space Flight Center

Melodie DeGuibert, ATK Aerospace Systems

Tiffany Lindsley, NASA Kennedy Space Center

Amy Pruett, NASA Goddard Space Flight Center

Agnes Vargas, The Boeing Company

Julie Zingerman, United Technologies Corporation



